Fact File

RIVER THAME

GUARDIANS OF THE WATER ENVIRONMENT

NRA

National Rivers Authority
Thames Region

Fact File-RIVER THAME

FACTS IN BRIEF

- The Thame rises at the foot of the Chilterns near Marsworth, Bucks and flows to its confluence with the Thames at Dorchester, Oxon.
- The Thame comprises 6.8% of the Thames catchment above Teddington and has a catchment area of 689 sq km.
- The average annual rainfall in the Thame catchment is 658mm.
- Its total length is 76.9 km.
- The fall in the river from its source to its confluence with the Thames is approximately 55 metres.
- The river is fed from a number of small streams derived from springs at the base of the scarp slope of lower chalk forming the Chilterns.
- Above Aylesbury to Little Milton, the river flows over a fairly flat clay zone and is consequently sluggish in nature. The final stretch to the Thames passes over river gravels.
- It is generally a rural catchment with agriculture predominating.

THE NATIONAL RIVERS AUTHORITY

Established on 1 September 1989, the NRA is an independent public body charged with safeguarding and improving the natural water environment. It is responsible for flood defence, regulating the quality of rivers and groundwaters, balancing the needs of various water users, protecting and improving fish stocks and promoting water based recreation of all kinds. The NRA is committed to improving wildlife habitats and conserving the natural environment in all it undertakes.

TRIBUTARIES

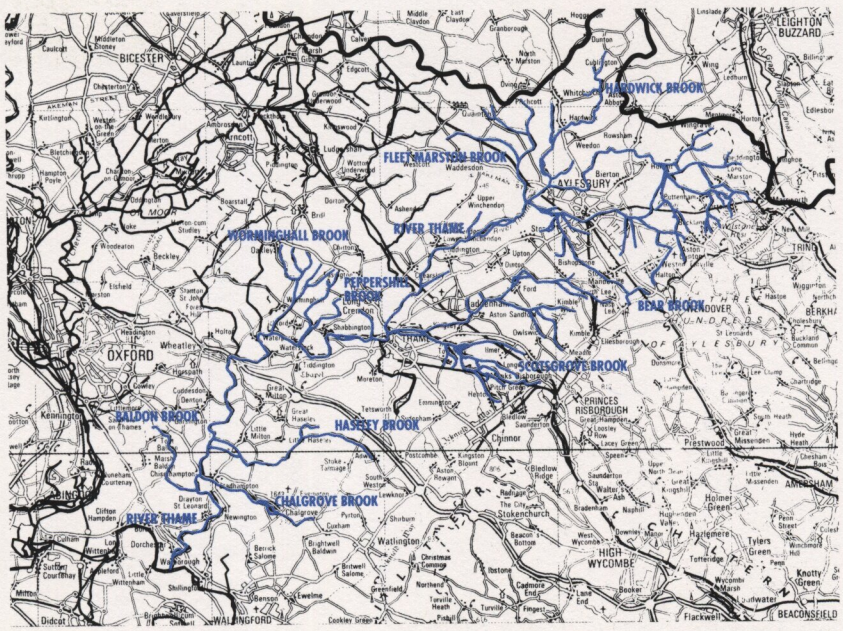
From its source, the river flows in a general south westerly direction and is joined by the Thistle Brook and Long Marston Brook. At the town of Aylesbury, the Fleet Marston Brook, Hardwick Brook and Bear Brook flow to their confluence. Near Thame, the Scotsgrove Brook, Peppershill Brook and Worminghall Brooks join the river. In the lower reaches the Thame is met by the Baldon, Haseley and Chalgrove Brooks.

PLANNING LIAISON

The NRA works with local planning authorities to protect the Thame catchment from undesirable development.

WATER QUALITY

The Thame is a slow moving river with a large number of relatively small tributaries. Sewage discharges and urban run-off have been a problem in the past but the river is currently of good quality, although water quality in the middle reaches is dominated by the effect of Aylesbury STW. There are 59 regular chemical monitoring points on the Thame and its tributaries.



Fact File-RIVER THAME

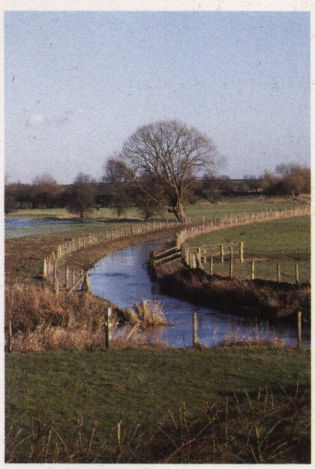
WATER QUALITY OBJECTIVES

From	To	Length Km	Objective
THAME			
Marsworth	Fleet Marston Brook	23.9	2B - Fair
Fleet Marston Brook	Thames	53.0	1B - Good
BEAR BROOK			
Wellonhead Stream	Thame	12.3	2B - Fair
HARDWICK BROOK			
North End	Perennial source	2.4	E*
Perennial source	Thame	16.1	2B - Fair
SCOTSGROVE BROOK			
Source	Little Kimble	1.0	E*
Little Kimble	Lashlake Stream	19.0	2B - Fair
Lashlake Stream	Thame	1.0	2B - Fair
WORMINGHALL BROOK			
Source	Worminghall STW	3.6	1B - Good
Worminghall STW	Thame	3.4	2B - Fair
HASELEY BROOK			
Source	Warpsgrove Ditch	8.3	1B - Good
Warpsgrove Ditch	Thame	5.9	2B - Fair
CHALGROVE BROOK			
Source	Thame	12.1	1B - Good

* E - Ephemeral: stream is regularly dry. When flowing it should comply with the objective of the downstream reach.

BIOLOGY

The River Thame is regularly surveyed for aquatic invertebrates by the biology section of the NRA. The fauna of the upper reaches is restricted by pollutants resulting from agricultural drainage, urban run off and effluent discharges. Some tributaries in the middle reaches also have faunas restricted by water quality problems. The lower reaches have very rich faunas with pollution sensitive animals such as stoneflies, mayflies and caddis flies present.



DISCHARGES

The area is typified by scattered settlements and consequently there are a large number of small sewage treatment plants.

The major discharges within the catchment are from sewage works operated by Thames Water Utilities Plc. These include:

Discharges	Cubic Metres Per Day	Type of Effluent
Aylesbury STW	80325	Sewage effluent
Princes Risborough STW	11700	Sewage effluent
Chinnor STW (No.1)	1900	Sewage effluent
Chinnor STW (No.2)	2121	Sewage effluent
Haddenham STW	6150	Sewage effluent
Thame STW	6477	Sewage effluent
Wheatley STW	2760	Sewage effluent
Chalgrove STW	3693	Sewage effluent
Watlington STW	6000	Sewage effluent

These figures represent the maximum amount permitted to be discharged. All the discharges in the catchment are regularly monitored by NRA environmental quality staff based in Oxford.

WATER RESOURCES

Rivers are a major source of drinking water. They also provide essential water supply to agriculture and industry, and a natural and efficient means of disposing of discharged effluent. Ensuring that there is enough water to go round calls for a delicate balancing act on the part of NRA staff. The majority of water taken out of most rivers is used for public drinking water and similarly, the majority of effluent comes from sewage treatment works.

In order to ensure that there is sufficient information on river flows, the NRA carries out regular measurements and has a number of fixed gauging stations.

Fact File-RIVER THAME

ABSTRACTIONS

Water can only be abstracted from rivers or groundwater under licence. NRA water resources staff are responsible for licensing abstractions throughout the Thames region. There are no major abstractions direct from the River Thame, but there are some small abstractions for agriculture and other uses. There are also abstractions made from groundwater.

FLOOD DEFENCE

Reducing the risk of flooding from the Thame on a day-to-day basis forms a part of the NRA Thames Region's work.

The NRA's river control room at Reading keeps a round the clock check on weather conditions and river levels. Staff interpret the information and give the local emergency services early warning of possible floods.

A flood defence team is based at Osney Yard, Oxford to carry out regular river maintenance work. This includes dredging, weedcutting and the removal of blockages. This team is mobilized during flood emergencies to keep the rivers clear of obstructions so that flood waters can be conveyed away as quickly as possible. They also provide assistance to environmental quality staff in cleaning up after pollution incidents.

The NRA is committed to protecting and improving the natural river and wherever possible our flood defence work includes features of environmental conservation and enhancement.

FISH IN THE THAME

The Thame supports coarse fish populations throughout most of its length. Upstream of Aylesbury, roach, perch and chub are dominant. Immediately downstream of Aylesbury, roach are the dominant species and this is also true of the Bear Brook whose confluence is immediately below Aylesbury Sewage Treatment Works.

At Thame, the Scotsgrove Brook is a major tributary, with its own populations of chub and dace. Thame Sewage Treatment Works discharges to the Brook and this has an effect on fish distribution.

Throughout the middle and lower reaches of the Thame, there are generally excellent coarse fish populations dominated by chub and roach. Large numbers of dace, perch and gudgeon are also present together with tench in most sections. Towards the lower end of the river, there are populations of barbel and there are plans to stock barbel further upstream.

Generally, fishing in the Thame is very good. However, there are physical problems such as high winter flows and abundant growth of aquatic vegetation in the summer to contend with.

National Rivers Authority
Thames Region:

Kings Meadow House,
Kings Meadow Road,
Reading,
Berkshire,
RG1 8DQ.
Tel: 0734 535000.

Published by the NRA. Concept, Design & Production by Sinclair Mason Ltd., Leeds & London.